

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 02-143510

(43)Date of publication of application : 01.06.1990

(51)Int.Cl.

H01F 10/16
C22C 30/00
C23C 14/14
C30B 29/52
C30B 29/68
H01F 41/20

(21)Application number : 63-298740

(71)Applicant : RES INST FOR PROD DEV

(22)Date of filing : 25.11.1988

(72)Inventor : TAKADA TOSHIO
OKUYAMA TETSUO
YODA KENICHI
SHINJO TERUYA

(54) FE-CO MAGNETIC FILM AND MANUFACTURE THEREOF

(57)Abstract:

PURPOSE: To contrive accomplishment of high permeability on a magnetic material by a method wherein a laminated structure, consisting of an Fe layer having 110 face as a lamination face, the FeCo alloy layer to be laminated on the Fe layer, and a Co layer to be laminated on the FeCo alloy layer having 101 face as the lamination face, is formed periodically.

CONSTITUTION: Fe and Co are alternately evaporated on a substrate using a vacuum evaporation method in such a manner that a formula (showing the relationship of Co evaporation layer thickness/(Fe evaporation layer thickness + Co evaporation layer thickness) ≤ 0.8 can be formed between the Co evaporation layer thickness and the Fe evaporation layer thickness formed by the previous stage. As Fe has a crystal growing property normally by having 110 face as a lamination face, the amorphous material such as glass, polyimide and the like, for example, can serve as a substrate. As crystal is easily grown on Co using 111 face as a lamination face, the thickness of evaporation layer of Co is set in such a manner that the above-mentioned relationship formula is formed between the evaporation layer thickness of Co and the evaporation layer thickness of Fe formed by the previous stage, and that crystal is grown on the entire Co with 101 face as a lamination face substantially.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office